



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF AIR & WASTE MANAGEMENT
89 KINGS HIGHWAY
P.O. BOX 1401
DOVER, DELAWARE 19903

OFFICE OF THE
DIRECTOR

TELEPHONE: (302) 736-4765

May 27, 1987

The Honorable Nancy W. Cook,
State Senator
Delaware State Senate
Legislative Hall
Dover, Delaware 19901

Dear Senator Cook:

I am writing to convey the progress made and status of the ground water clean-up at Chem-Solv, Inc., in Cheswold, Delaware. This site was a former solvent recovery operation which was destroyed by an explosion and fire in September 1984. Investigation of ground water conditions by this Department immediately afterwards indicated that soils and ground water beneath the site were highly contaminated by chemical solvents. Some of the of the contaminants had already migrated off-site, indicating that leaks or spills had occurred prior to the catastrophic closure of the operation.

Because of the perceived imminent threat to well water supplies in the area, the Department proceeded to decontaminate soils and ground water at the site. The soils were excavated, aerated to strip off volatile contaminants and reburied on-site. The soils decontamination work was performed during August 1985. A final report documenting the effectiveness of this effort was completed in May 1986.

Ground water contaminants were recovered by a series of five small diameter wells starting in November 1985. A sixth well was added to increase the rate of contaminant recovery in the summer of 1986. The contaminated water was treated in a aeration tower and discharged to the Kent County sewer system.

Our consultant has just completed a report summarizing the results of the ground water contaminant recovery effort. Copies of the conclusions and recommendation sections of the report are attached.

In summary, the report concludes that the recovery system was successful in retaining and removing contaminants in the ground water beneath the site. However, the contaminants which had migrated off-site could not be recovered and objectionable concentrations of residual contaminants remain on the site.

AB500201

The Honorable Senator Cook

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These residual contaminants may occur in part as an immiscible solvent pool or film on the silty clay layer about 20 feet below the surface. The contaminants which were likely spilled prior to the 1984 fire - and beyond the range of capture by our recovery wells - may threaten the quality of water several downgradient domestic water wells. Remaining contaminants, both on and off-site, will be difficult and expensive to completely recover.

A shallow well at a residence immediately downgradient of the Chem-Solv spill was found to be contaminated in 1985. However, the source of this contamination is apparently a gasoline spill or leak on the property (which was formerly a service station) immediately north of Chem-Solv. The Department provided a treatment system to remove contaminants from the drinking water from this well for about a year and replaced the contaminated supply with a deep, properly protected well this month.

The recommendations in the report are that the residual contamination on-site be further explored with a few shallow wells. If any free phase solvents are discovered, an attempt should be made to recover, volatilize, degrade them. The threatened downgradient domestic water supply wells should be replaced with a source of water safe from contamination, and the residual contaminants should be allowed to attenuate away naturally toward the Leipsic River. (The contaminants will have no significant - in fact likely no detectable - impact on the stream).

Secure sources of water may be obtained from deeper (properly constructed) wells or from a public water system. The Department's water management policy encourages the development of public water systems. It is possible that a combination of federal grants from HUD community development funds and the Farm Home Administration could pay 60-80% of the total cost of a public water system for the Town of Cheswold. The local share might be supplemented by State contaminant clean-up contingency funds as an alternative to the continued contaminant recovery. The extension of public water would benefit the entire Cheswold Community.

To date, we have expended approximately \$350,000 in State funds on Chem-Solv investigations and remedial action. We are pursuing recovery of these costs from the Chem-Solv owner/operators and their insurer. The cost recovery process is being processed through the court system.

The Chem-Solv site was proposed for the National Priorities List by EPA this year. Addition to the NPL would qualify Chem-Solv for further investigation, evaluation and remedial action under the Superfund program. The site may have qualified for the NPL in the past. However, our experience with the Superfund program and discussions with EPA officials in 1985 convinced us that handling Chem-Solv through the Superfund program would have resulted in a lengthy delay before beginning an investigation, required a more extensive and expensive process of investigation and documentation, and forestalled remedial action indefinitely. With typical site investigations taking at least two years and costing in excess of a million dollars, we are opposing the proposed addition of Chem-Solv to the NPL.

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We believe that completion of a public system for the entire Town of Cheswold would cost less - and certainly involve a fraction of State and contributions - than a Superfund investigation. Remedial Action under Superfund would be further in the future and involve a State contribution.

We propose to share the conclusions and recommendations of our Chem-Solv project with the citizens in the area and solicit their comments and preferences on proceeding with the idea of assistance in extending public water to the area threatened by contaminants. We welcome your comments on this subject and would be happy to provide you with further information or answer questions on this matter. We will contact you shortly about the time and place for our public meeting.

Sincerely,

Phillip C. Ratallick
Phillip C. Ratallick
Director

PGR:MAA:dmw
MAA87001

Enclosure

AR500203



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TELEPHONE: (302) 736-4765

May 27, 1987

The Honorable Donald M. Clark
State Representative
Delaware House of Representatives
Legislative Hall
Dover, Delaware 19901

Dear Representative Clark:

I am writing to convey the progress made and status of the ground water clean-up at Chem-Solv, Inc., in Cheswold, Delaware. This site was a former solvent recovery operation which was destroyed by an explosion and fire in September 1984. Investigation of ground water conditions by this Department immediately afterwards indicated that soils and ground water beneath the site were highly contaminated by chemical solvents. Some of the of the contaminants had already migrated off-site, indicating that leaks or spills had occurred prior to the catastrophic closure of the operation.

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AR500204



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DIRECTOR

TELEPHONE: (302) 736-4765

May 27, 1987

The Honorable Dorothy L. Dampsey
Mayor of Cheswold
Cheswold, Delaware 19936

Dear Mayor Dampsey:

I am writing to convey the progress made and status of the ground water water clean-up at Chem-Solv, Inc., in Cheswold, Delaware. This site was a former solvent recovery operation which was destroyed by an explosion and fire in September 1984. Investigation of ground water conditions by this Department immediately afterwards indicated that soils and ground water beneath the site were highly contaminated by chemical solvents. Some of the of the contaminants had already migrated off-site, indicating that leaks or spills had occurred prior to the catastrophic closure of the operation.

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DIRECTOR

TELEPHONE (302) 736-4765

May 27, 1987

The Honorable Jefferson Adams
Commissioner
Kent County Levy Court
County Administration Building
4141 Federal Street
Dover, Delaware 19901

Dear Mr. Adams:

I am writing to convey the progress made and status of the ground water water clean-up at Chem-Solv, Inc., in Cheswold, Delaware. This site was a former solvent recovery operation which was destroyed by an explosion and fire in September 1984. Investigation of ground water conditions by this Department immediately afterwards indicated that soils and ground water beneath the site were highly contaminated by chemical solvents. Some of the of the contaminants had already migrated off-site, indicating that leaks or spills had occurred prior to the catastrophic closure of the operation.

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89 KINGS HIGHWAY
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OFFICE OF THE
DIRECTOR

TELEPHONE: (302) 736-4785

May 27, 1987

The Honorable Donald Culver
Commissioner
Kent County Levy Court
County Administration Building
4141 Federal Street
Dover, DE 19901

Dear Mr. Culver:

I am writing to convey the progress made and status of the ground water clean-up at Chem-Solv, Inc., in Cheswold, Delaware. This site was a former solvent recovery operation which was destroyed by an explosion and fire in September 1984. Investigation of ground water conditions by this Department immediately afterwards indicated that soils and ground water beneath the site were highly contaminated by chemical solvents. Some of the contaminants had already migrated off-site, indicating that leaks or spills had occurred prior to the catastrophic closure of the operation.

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AR500207



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89 KINGS HIGHWAY
P.O. BOX 1401
DOVER, DELAWARE 19903

OFFICE OF THE
DIRECTOR

TELEPHONE: (302) 738-4765

May 27, 1987

The Honorable William Paskey
President
Kent County Levy Court
County Administration Building
4141 Federal Street
Dover, DE 19901

Dear Mr. Paskey:

I am writing to convey the progress made and status of the ground water clean-up at Chem-Solv, Inc., in Cheswold, Delaware. This site was a former solvent recovery operation which was destroyed by an explosion and fire in September 1984. Investigation of ground water conditions by this Department immediately afterwards indicated that soils and ground water beneath the site were highly contaminated by chemical solvents. Some of the of the contaminants had already migrated off-site, indicating that leaks or spills had occurred prior to the catastrophic closure of the operation.

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AR500208

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

FINAL REPORT

GROUNDWATER DECONTAMINATION
CHEM SOLV SOLVENT RECOVERY FACILITY
CHESWOLD, DELAWARE

MARCH, 1987



CABE ASSOCIATES, INC

Consulting Engineers

P.O. BOX 877 DOVER, DELAWARE 19903-0877
302-674-9280

AR500209



Earth Data Incorporated

HYDROGEOLOGISTS

605 S. TALBOT ST.
ST. MICHAELS, MARYLAND 21663
301-745-5046